

Name: _____

Date: _____

FOIL when $A \neq 1$ SLTN (version 110)

FOIL the expressions shown below:

1. $(-7x - 4)(-2x - 6)$

$$\begin{aligned} &(-7)(-2)x^2 + (-7)(-6)x + (-4)(-2)x + (-4)(-6) \\ &\quad (14)x^2 + (42)x + (8)x + (24) \\ &\quad 14x^2 + 50x + 24 \end{aligned}$$

2. $(-6x - 7)(4x - 7)$

$$\begin{aligned} &(-6)(4)x^2 + (-6)(-7)x + (-7)(4)x + (-7)(-7) \\ &\quad (-24)x^2 + (42)x + (-28)x + (49) \\ &\quad -24x^2 + 14x + 49 \end{aligned}$$

3. $(5x + 3)(-9x - 5)$

$$\begin{aligned} &(5)(-9)x^2 + (5)(-5)x + (3)(-9)x + (3)(-5) \\ &\quad (-45)x^2 + (-25)x + (-27)x + (-15) \\ &\quad -45x^2 - 52x - 15 \end{aligned}$$

4. $(2x + 3)(-4x + 5)$

$$\begin{aligned} &(2)(-4)x^2 + (2)(5)x + (3)(-4)x + (3)(5) \\ &\quad (-8)x^2 + (10)x + (-12)x + (15) \\ &\quad -8x^2 - 2x + 15 \end{aligned}$$

5. $(-7x - 8)(4x + 7)$

$$\begin{aligned} &(-7)(4)x^2 + (-7)(7)x + (-8)(4)x + (-8)(7) \\ &\quad (-28)x^2 + (-49)x + (-32)x + (-56) \\ &\quad -28x^2 - 81x - 56 \end{aligned}$$

FOIL the expressions shown below:

6. $(-2x - 3)(5x - 5)$

$$\begin{aligned} &(-2)(5)x^2 + (-2)(-5)x + (-3)(5)x + (-3)(-5) \\ &(-10)x^2 + (10)x + (-15)x + (15) \\ &-10x^2 - 5x + 15 \end{aligned}$$

7. $(-9x - 9)(-5x - 2)$

$$\begin{aligned} &(-9)(-5)x^2 + (-9)(-2)x + (-9)(-5)x + (-9)(-2) \\ &(45)x^2 + (18)x + (45)x + (18) \\ &45x^2 + 63x + 18 \end{aligned}$$

8. $(-8x - 2)(-6x - 8)$

$$\begin{aligned} &(-8)(-6)x^2 + (-8)(-8)x + (-2)(-6)x + (-2)(-8) \\ &(48)x^2 + (64)x + (12)x + (16) \\ &48x^2 + 76x + 16 \end{aligned}$$

9. $(-5x + 2)(2x - 3)$

$$\begin{aligned} &(-5)(2)x^2 + (-5)(-3)x + (2)(2)x + (2)(-3) \\ &(-10)x^2 + (15)x + (4)x + (-6) \\ &-10x^2 + 19x - 6 \end{aligned}$$

10. $(-4x - 7)(-7x - 9)$

$$\begin{aligned} &(-4)(-7)x^2 + (-4)(-9)x + (-7)(-7)x + (-7)(-9) \\ &(28)x^2 + (36)x + (49)x + (63) \\ &28x^2 + 85x + 63 \end{aligned}$$